Level 1				
Level 1				
1				
Level 1				

- P. StrittEtter Schurmann. Reduction of ferredoxin:thioredoxin reductase by artificial electron donors. Photosynthesis Research. 1995. 46:309-312
- M. Walter Bayer. Purification and partial characterisation of a reversible artificial mediator accepting NADH oxidoreductase from Clostridium thermoaceticum. Eur J Biochem. 1996. 239:686-91
- S. D. Aust. Ferritin as a source of iron and protection from iron-induced toxicities. Toxicology Letters. 1995. 82-3:941-944
- D. N. R. Cederbaum Rao. Generation of reactive oxygen species by the redox cycling of nitroprusside. Biochimica Et Biophysica Acta-General Subjects. 1996. 1289:195-202
- A. Tolbert Goyal. Association of glycolate oxidation with photosynthetic electron transport in plant and algal chloroplasts. Proceedings of the National Academy of Sciences of the United States of America. 1996. 93:3319-3324
- E. Willner Zahavy. Photoinduced electron transfer in eosin-modified Co(II)-protoporphyrin IX reconstituted myoglobin and alpha- or beta-hemoglobin subunits: Photocatalytic transformations by the reconstituted photoenzymes. Journal of the American Chemical Society. 1996. 118:12499-12514
- A. Barbaise Walcarius. Factors affecting the analytical applications of zeolite-modified electrodes Preconcentration of electroactive species. Analytica Chimica Acta. 1997. 340:61-76
- J. Davison Collen. In vivo measurement of active oxygen production in the brown alga Fucus evanescens using 2',7'-dichlorohydrofluorescein diacetate. Journal of Phycology. 1997. 33:643-648
- P. C. Neumann Klohn. Impairment of respiration and oxidative phosphorylation by redox cyclers 2-nitrosofluorene and menadione. Chemico-Biological Interactions. 1997. 106:15-28
- P. Ohmann Landgraf. Light induced oxidative stress in Euglena gracilis. Photosynthetica. 1997. 33:433-442
- M. Andreesen Dorn. Fumarate reductase of Clostridium formicoaceticum. A peripheral membrane protein. Arch Microbiol. 1978. 119:11-Jul
- Q. Griffin Jiang. Intraphagosomal chlorination dynamics and yields determined using unique fluorescent bacterial mimics. Chemical Research in Toxicology. 1997. 10:1080-1089
- K. Kamo Sonoike. The mechanism of the degradation of psaB gene product, one of the photosynthetic reaction center subunits of Photosystem I, upon photoinhibition. Photosynthesis Research. 1997. 53:55-63
- V. V. Barber Pollock. Biotin sulfoxide reductase. Heterologous expression and characterization of a functional molybdopterin guanine dinucleotide-containing enzyme. J Biol Chem. 1997. 272:3355-62
- E. Kang Hasegawa. A dual effect of 1-methyl-4-phenylpyridinium (MPP+)-analogs on the respiratory chain of bovine heart mitochondria. Arch Biochem Biophys. 1997. 337:69-74
- J. F. Valle Palatnik. Oxidative stress causes ferredoxin-NADP+ reductase solubilization from the thylakoid membranes in methyl viologen-treated plants. Plant Physiol. 1997. 115:1721-7
- M. I. Gotor Garcia-Sanchez. Critical residues of Chlamydomonas reinhardtii ferredoxin for interaction with nitrite reductase and glutamate synthase revealed by site-directed mutagenesis. Eur J Biochem. 1997. 250:364-8
- M. A. Fischer Vanoni. The recombinant alpha subunit of glutamate synthase: spectroscopic and catalytic properties. Biochemistry. 1998. 37:1828-38
- H. Hirai Shimada. Mitochondrial NADH-quinone oxidoreductase of the outer membrane is responsible for paraguat cytotoxicity in rat livers. Arch Biochem Biophys. 1998. 351:75-81

The ferredoxin:thioredoxin reductase is an essential enzyme of the light dependent regulatory system in oxygenic photo An NAD(H)-dependent artificial mediator accepting pyridine nucleotide oxidoreductase present in Clostridium thermoac The iron storage protein ferritin can contribute to or protect against toxicities which involve iron. Iron can catalyze the ∞ The formation of reactive oxygen species during the redox cycling of sodium nitroprusside by rat liver microsomes and b Photosynthetic carbon metabolism is initiated by ribulose-bisphosphate carboxylase/oxygenase (Rubisco), which uses be A series of hemo-protein-derived photocatalysts, prepared by reconstitution of the respective apo-proteins with Co(II)-pi The influence of various experimental parameters on the electrochemical response of zeolite-modified electrodes (ZMEs Intracellular production of active oxygen in the brown alga Fucus evanescens C. Ag: was studied by measuring the capaci The present study was designed to investigate the effects of 2-nitrosofluorene (NOF), a metabolite of carcinogenic 2-ace $^{\circ}$ Strong irradiation induced in isolated chloroplasts and thylakoids of E. gracilis inactivating and damaging processes of me When Clostridium formicoaceticum was grown on fumarate or L-malate crude cell extracts contained a high fumarate re Fluorescein was covalently attached through a cyst;amine linker group to carboxy-derivatized polyacrylamide microsphe The psaB gene product (PsaB protein), one of the reaction center subunits of Photosystem I (PS I), was specifically degrad Rhodobacter sphaeroides f. sp. denitrificans biotin sulfoxide reductase has been heterologously expressed in Escherichia We examined effects of several compounds, structurally related to 1-methyl-4-phenylpyridinium (MPP+), on the NADH-f qThe flavoenzyme ferredoxin-NADP+ reductase (FNR) is a member of the cellular defense barrier against oxidative damag Incubation of wild-type ferredoxin (Fd) with Chlamydomonas reinhardtii crude extract in the presence of a carboxyl activ As part of our studies of Azospirillum brasilense glutamate synthase, a complex iron-sulfur flavoprotein, we have overpro We investigated the existence of an NADH-dependent paraquat (PQ) reduction system in rat liver mitochondria (Mt) in re

Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
NUL NEIEVALL			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			

Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							
Level 1							

- M. Hurley Hirasawa. The role of aromatic and acidic amino acids in the electron transfer reaction catalyzed by spinach ferredoxin-dependent glutamate synthase. Biochim Biophys Acta. 1998. 1363:134-46
- H. G. Sharma Raj. Mechanism of biochemical action of substituted 4-methylbenzopyran-2-ones. Part 3: A novel mechanism for the inhibition of biological membrane lipid peroxidation by dioxygenated 4-methylcoumarins mediated by the formation of a stable ADP-Fe-inhibitor mixed ligand complex. Bioorg Med Chem. 1998. 6:2205-12
- M. Vermaas Tichy. In vivo role of catalase-peroxidase in synechocystis sp. strain PCC 6803. J Bacteriol. 1999. 181:1875-82
- T. Todoriki Nagata. Gamma-radiation induces leaf trichome formation in Arabidopsis. Plant Physiol. 1999. 120:113-20
- K. Pan Hirai. Cytochemical energy-filtering transmission electron microscopy of mitochondrial free radical formation in paraquat cytotoxicity. J Electron Microsc (Tokyo). 1999. 48:289-96
- J. A. Ghazarian Kulkoski. Purification and characterization of the ferredoxin component of 25-hydroxycholecalciferol 1 alpha-hydroxylase. Biochem J. 1979. 177:673-8
- M. Tomita. Comparison of one-electron reduction activity against the bipyridylium herbicides, paraquat and diquat, in microsomal and mitochondrial fractions of liver, lung and kidney (in vitro). Biochem Pharmacol. 1991. 42:303-9
- J. F. Carrillo Palatnik. The role of photosynthetic electron transport in the oxidative degradation of chloroplastic glutamine synthetase. Plant Physiol. 1999. 121:471-8
- D. E. Hathway. Toxic action/toxicity. Biol Rev Camb Philos Soc. 2000. 75:95-127
- V. Shapira Irihimovitch. Glutathione redox potential modulated by reactive oxygen species regulates translation of Rubisco large subunit in the chloroplast. J Biol Chem. 2000. 275:16289-95
- A. F. Men'shikov Vanin. [The source of the iron binding with nitric oxide in activated macrophages]. Izv Akad Nauk SSSR Biol. 1991. #volume#:784-8
- N. Sato Takahashi. Metabolic pathways for cytotoxic end product formation from glutamate- and aspartate-containing peptides by Porphyromonas gingivalis. J Bacteriol. 2000. 182:4704-10
- V. V. Barber Pollock. Serine 121 is an essential amino acid for biotin sulfoxide reductase functionality. J Biol Chem. 2000. 275:35086-90
- M. C. Witek Granger. Standard electrochemical behavior of high-quality, boron-doped polycrystalline diamond thin-film electrodes. Anal Chem. 2000. 72:3793-804
- E. Kalai Hideg. Do oxidative stress conditions impairing photosynthesis in the light manifest as photoinhibition?. Philos Trans R Soc Lond B Biol Sci. 2000. 355:1511-6
- L. M. Martin Casano. Hydrogen peroxide mediates the induction of chloroplastic Ndh complex under photooxidative stress in barley. Plant Physiol. 2001. 125:1450-8
- J. Ohno Mano. Chloroplastic ascorbate peroxidase is the primary target of methylviologen-induced photooxidative stress in spinach leaves: its relevance to monodehydroascorbate radical detected with in vivo ESR. Biochim Biophys Acta. 2001. 1504:275-87
- T. S. Marder Babu. Synergistic effects of a photooxidized polycyclic aromatic hydrocarbon and copper on photosynthesis and plant growth: evidence that in vivo formation of reactive oxygen species is a mechanism of copper toxicity. Environ Toxicol Chem. 2001. 20:1351-8
- R. L. Cronin Mancinelli. The purification and properties of a cd-cytochrome nitrite reductase from Paracoccus halodenitrificans. Arch Microbiol. 1986. 145:202-8
- E. M. Langford Lindsay. Photochemical Reactivity of W(CO)(4)(phen): Evidence for Prompt One-Electron Transfer in Competition with Vibrational Relaxation. Inorg Chem. 1999. 38:4771-4776
- R. Haupl Lomoth. Redox-switchable direction of photoinduced electron transfer in an Ru(bpy)3(2+)-viologen dyad. Chemistry. 2002. 8:102-10

Treatment of the ferredoxin-dependent, spinach glutamate synthase with N-bromosuccinimide (NBS) modifies 2 mol of $^\circ$ 7,8-Dihydroxy-4-methylcoumarin (DHMC) and 7,8-diacetoxy-4-methylcoumarin (DAMC) have been reported to effectivel The katG gene coding for the only catalase-peroxidase in the cyanobacterium Synechocystis sp. strain PCC 6803 was dele We observed induction of additional trichome formation on the adaxial surface of mature leaves of Arabidopsis after ma The generation of oxygen free radicals was investigated using cytochemistry and its energy-filtering transmission electro The chick kidney mitochondrial iron--sulphur protein (ferredoxin), a component of the NADPH--cytochrome P-450 reduct The first one-electron reduction steps of paraquat and diquat were compared using microsomal and mitochondrial fracti The stability of chloroplastic glutamine synthetase (GS; EC 6.3.1.2) was investigated under photooxidative stress using wl Some six or so physiological systems, essential to normal mammalian life, are involved in poisoning; an intoxication that Previous work showed a transient but dramatic arrest in the synthesis of Rubisco large subunit (LSU) upon transfer of Chl No decrease in iron-sulphur centers was found in cultured macrophage cells (J774) after the treatment with nitric oxide (Metabolic pathways involved in the formation of cytotoxic end products by Porphyromonas gingivalis were studied. The Rhodobacter sphaeroides f. sp. denitrificans biotin sulfoxide reductase (BSOR) catalyzes the reduction of d-biotin d-sulfo Standard electrochemical data for high-quality, boron-doped diamond thin-film electrodes are presented. Films from two We compared the effect of photoinhibition by excess photosynthetically active radiation (PAR), UV-B irradiation combine Chloroplast-encoded NDH polypeptides (components of the plastid Ndh complex) and the NADH dehydrogenase activity Methylviologen (MV) induces oxidative damages in leaves. In order to understand its mechanism we studied initial bioch Heavy metals and polycyclic aromatic hydrocarbons (PAHs) are often cocontaminants in industrialized environments, yet Paracoccus halodenitrificans, grown anaerobically in the presence of nitrite, contained membrane and cytoplasmic nitrit Excitation into either the metal-to-ligand charge-transfer, MLCT, band or the ligand field, LF, band of W(CO)(4)(phen) pro Quenching of the 3MLCT excited state of [Ru(bpy)3]2+(bpy=bipyridine) by the reduction products (MV*+ and MV0) of m

	_		
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
Not Relevant			
NULNEEVAIL			
Not Relevant			
Not Relevant			
Not Relevant			
NILL DUTCH			
Not Relevant			
Not Relevant			
NILL DUTCH	1		
Not Relevant			
Not Relevant			
No. 4 Charles			
Not Relevant			
Not Relevant			
Not Relevant			
NULNEEVall			
Not Relevant			
Not Relevant			
Not Relevant			
nochelevalit			
Not Relevant			
	3		